

MANUFACTURING DESIGN AND PROCESS ANALYSIS SYSTEM

Abstract of the Disclosure

5 Methods, apparatuses and systems that facilitate the design, production and/or
measurement tasks associated with manufacturing and other processes. In one embodiment, the
present invention provides an understanding of how the multiple characteristics of a given
process output are related to each other and to process inputs. This knowledge facilitates a
reduction in measurement costs. It also facilitates an understanding of the sometimes complex
10 interrelationships between design targets, design tolerances, process inputs, process control
variables, average process output and variation in the process output. As discussed in more
detail below, embodiments of the present invention facilitate 1.) determination of design target
values, 2.) determination of design specification limits, 3.) design of process inputs, 4.)
determination of process control variable settings, and/or 5.) reduction of measurement costs.

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